

Connecting via Winsock to STN

Welcome to STN International! Enter x:X

LOGINID:SSPTABEM1624

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	MAR 31	IFICDB, IFIPAT, and IFIUDB enhanced with new custom IPC display formats
NEWS	3	MAR 31	CAS REGISTRY enhanced with additional experimental spectra
NEWS	4	MAR 31	CA/CAPplus and CASREACT patent number format for U.S. applications updated
NEWS	5	MAR 31	LPCI now available as a replacement to LDPCI
NEWS	6	MAR 31	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS	7	APR 04	STN AnaVist, Version 1, to be discontinued
NEWS	8	APR 15	WPIDS, WPINDEX, and WPIX enhanced with new predefined hit display formats
NEWS	9	APR 28	EMBASE Controlled Term thesaurus enhanced
NEWS	10	APR 28	IMSRESEARCH reloaded with enhancements
NEWS	11	MAY 30	INPAFAMDB now available on STN for patent family searching
NEWS	12	MAY 30	DGENE, PCTGEN, and USGENE enhanced with new homology sequence search option
NEWS	13	JUN 06	EPFULL enhanced with 260,000 English abstracts
NEWS	14	JUN 06	KOREAPAT updated with 41,000 documents
NEWS	15	JUN 13	USPATFULL and USPAT2 updated with 11-character patent numbers for U.S. applications
NEWS	16	JUN 19	CAS REGISTRY includes selected substances from web-based collections
NEWS	17	JUN 25	CA/CAPplus and USPAT databases updated with IPC reclassification data
NEWS	18	JUN 30	AEROSPACE enhanced with more than 1 million U.S. patent records
NEWS	19	JUN 30	EMBASE, EMBAL, and LEMBASE updated with additional options to display authors and affiliated organizations
NEWS	20	JUN 30	STN on the Web enhanced with new STN AnaVist Assistant and BLAST plug-in
NEWS	21	JUN 30	STN AnaVist enhanced with database content from EPFULL
NEWS	22	JUL 28	CA/CAPplus patent coverage enhanced
NEWS	23	JUL 28	EPFULL enhanced with additional legal status information from the epoline Register
NEWS	24	JUL 28	IFICDB, IFIPAT, and IFIUDB reloaded with enhancements
NEWS	25	JUL 28	STN Viewer performance improved
NEWS	26	AUG 01	INPADOCDB and INPAFAMDB coverage enhanced
NEWS	27	AUG 13	CA/CAPplus enhanced with printed Chemical Abstracts page images from 1967-1998
NEWS	28	AUG 15	CAOLD to be discontinued on December 31, 2008
NEWS	29	AUG 15	CAPplus currency for Korean patents enhanced
NEWS	30	AUG 25	CA/CAPplus, CASREACT, and IFI and USPAT databases enhanced for more flexible patent number searching

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 09:44:03 ON 25 AUG 2008

=> fil reg
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 0.21 0.21

FILE 'REGISTRY' ENTERED AT 09:44:21 ON 25 AUG 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 24 AUG 2008 HIGHEST RN 1043413-62-2
DICTIONARY FILE UPDATES: 24 AUG 2008 HIGHEST RN 1043413-62-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

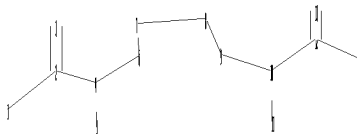
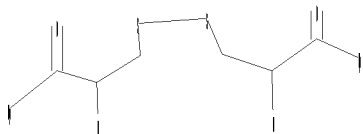
TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>
Uploading C:\Documents and Settings\bmcldowell\My Documents\misc\10562625.str



chain nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14
chain bonds :

1-2 2-3 2-4 4-5 4-6 6-7 7-8 8-9 9-10 10-11 10-12 12-13 12-14
exact/norm bonds :
1-2 2-3 4-5 6-7 7-8 8-9 10-11 12-13 12-14
exact bonds :
2-4 4-6 9-10 10-12

Match level :
1:Atom 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:Atom

L1 STRUCTURE UPLOADED

=> s l1 sss sam
SAMPLE SEARCH INITIATED 09:44:40 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 348 TO ITERATE

100.0% PROCESSED 348 ITERATIONS 8 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 5841 TO 8079
PROJECTED ANSWERS: 8 TO 329

L2 8 SEA SSS SAM L1

=> s l1 sss full
FULL SEARCH INITIATED 09:44:54 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 7435 TO ITERATE

100.0% PROCESSED 7435 ITERATIONS 116 ANSWERS
SEARCH TIME: 00.00.01

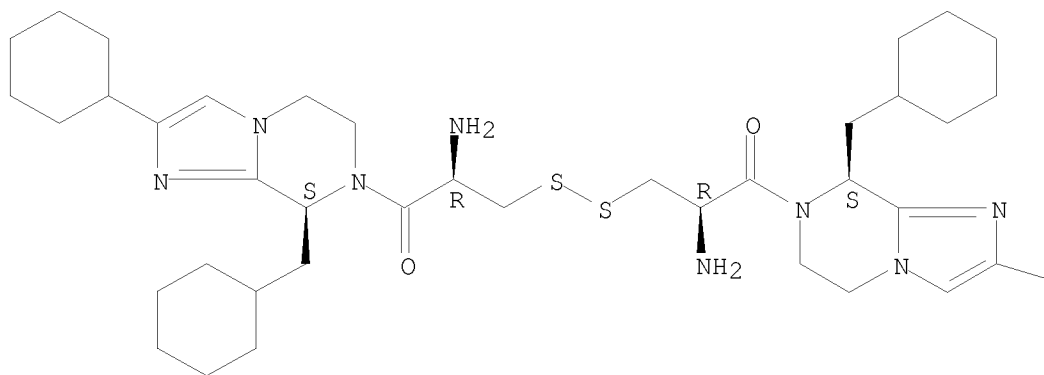
L3 116 SEA SSS FUL L1

=> d scan

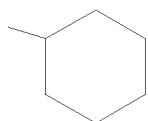
L3 116 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Imidazo[1,2-a]pyrazine, 7,7'-[dithiobis(2-amino-1-oxo-3,1-
propanediyl)]bis[2-cyclohexyl-8-(cyclohexylmethyl)-5,6,7,8-tetrahydro-,
[8S-[7[S*[S*(R*)]],8R*]]- (9CI)
MF C44 H70 N8 O2 S2

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

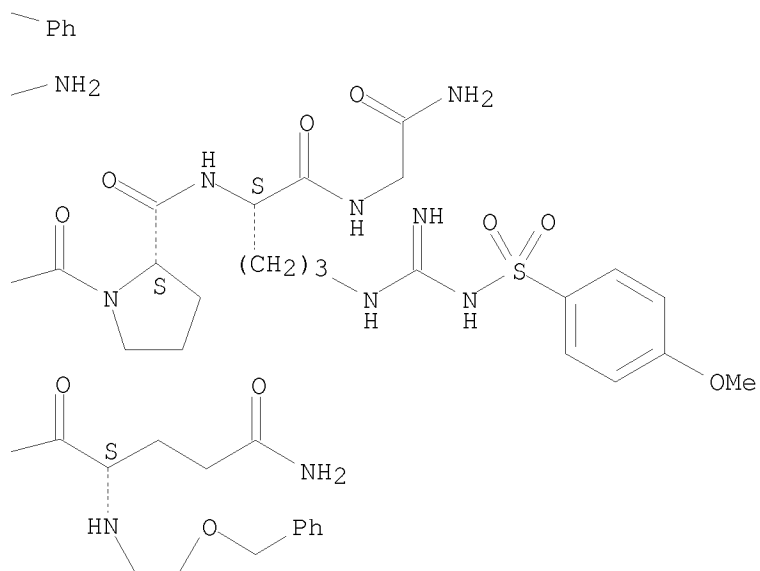
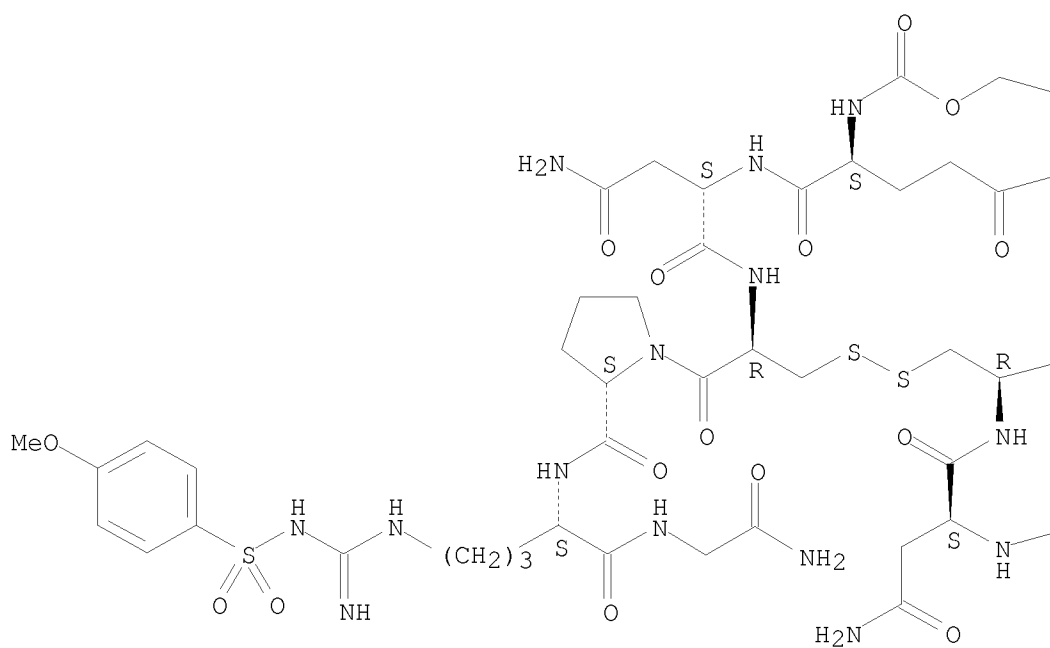
L3 116 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Glycinamide, N2-[(phenylmethoxy)carbonyl]-L-glutaminy-L-asparaginy-L-cysteinyl-L-prolyl-N5-[imino[[[(4-methoxyphenyl)sulfonyl]amino]methyl]-L-ornithyl-, bimol. (3→3')-disulfide (9CI)

SQL 12,6,6

MF C80 H110 N24 O26 S4

Absolute stereochemistry.





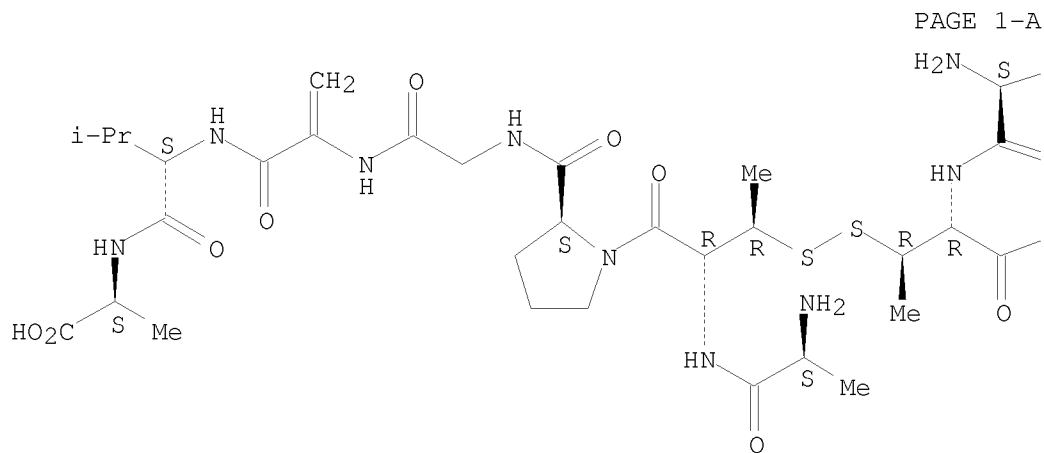
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

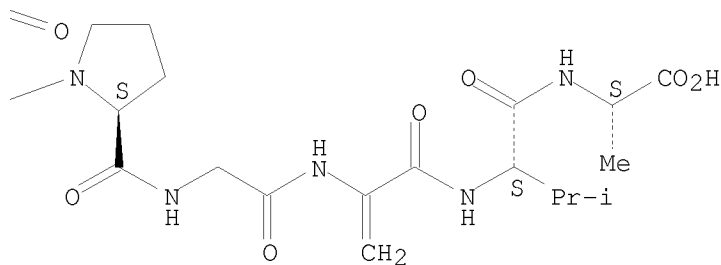
L3 116 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
 IN L-Alanine, L-alanyl-(2R,3R)-2-amino-3-mercaptobutanoyl-L-prolylglycyl-2,3-
 didehydroalanyl-L-valyl-, bimol. (2→2')-disulfide (9CI)
 SQL 14,7,7
 MF C50 H80 N14 O16 S2

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



Me



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 116 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

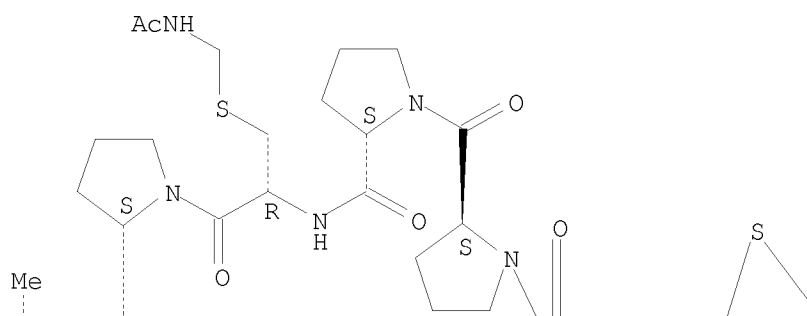
IN L-Proline, O-(1,1-dimethylethyl)-L-threonyl-S-[(acetylamino)methyl]-L-cysteinyll-L-prolyl-L-prolyl-L-cysteinyll-L-prolyl-L-alanyl-, (5→2')-disulfide with O-(1,1-dimethylethyl)-L-threonyl-L-cysteinyll-L-prolyl-L-prolyl-S-[(acetylamino)methyl]-L-cysteinyll-L-prolyl-L-alanyl-L-proline (9CI)

MF C80 H128 N18 O22 S4

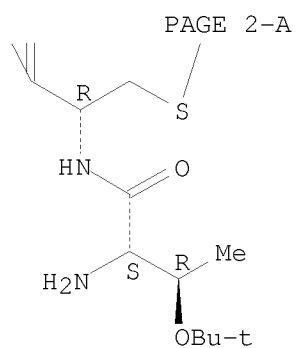
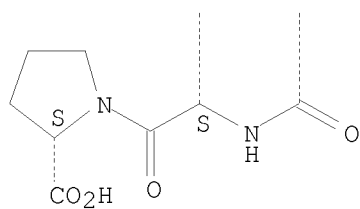
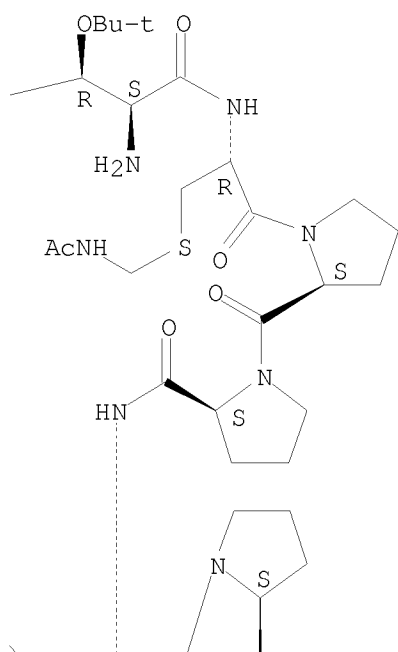
Absolute stereochemistry.

PAGE 1-A

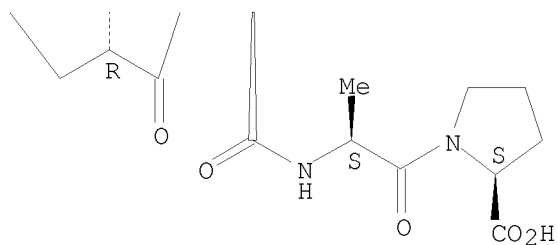
Me



PAGE 1-B



PAGE 2-B



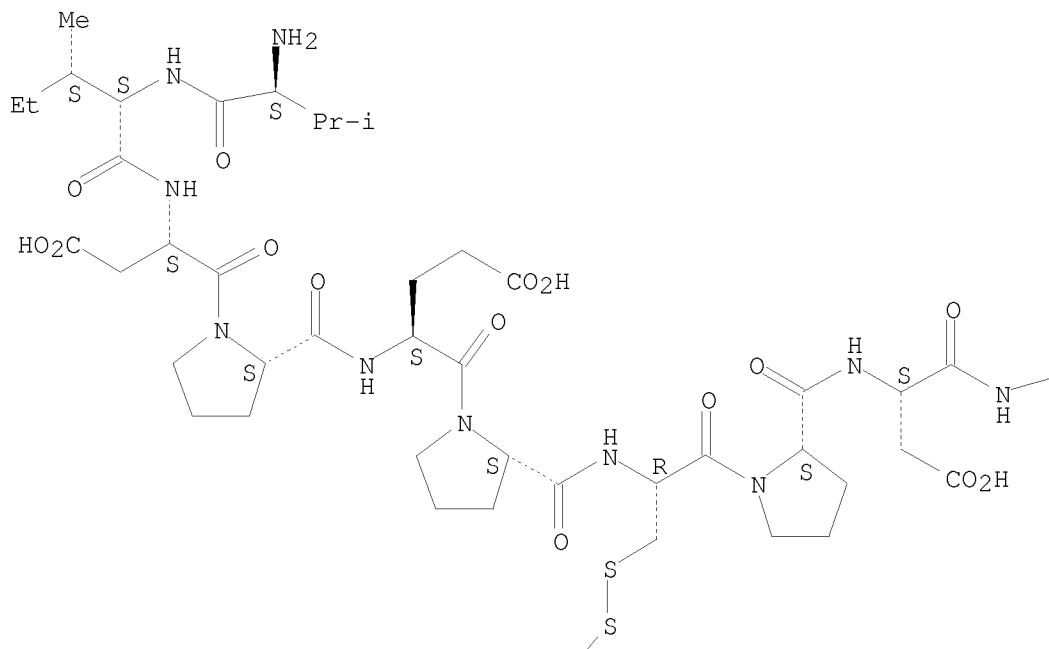
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

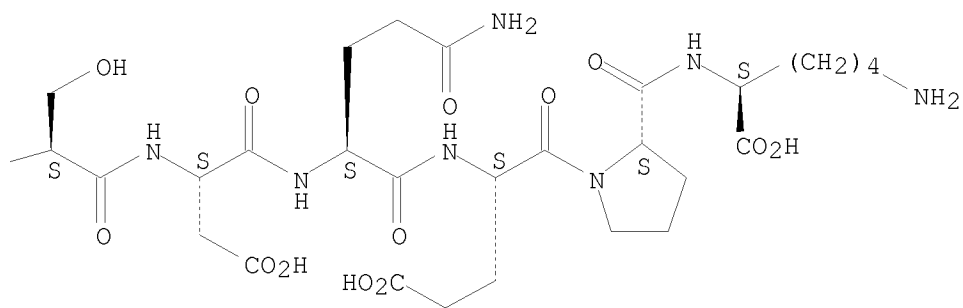
L3 116 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
 IN L-Lysine, L-valyl-L-isoleucyl-L- α -aspartyl-L-prolyl-L- α -
 glutamyl-L-prolyl-L-cysteinyl-L-prolyl-L- α -aspartyl-L-seryl-L-
 α -aspartyl-L-glutamyl-L- α -glutamyl-L-prolyl-, bimol.
 (7 \rightarrow 7')-disulfide
 SQL 30,15,15
 MF C140 H216 N34 O56 S2

Absolute stereochemistry.

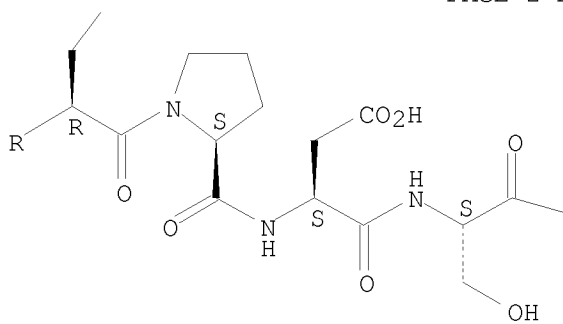
PAGE 1-A



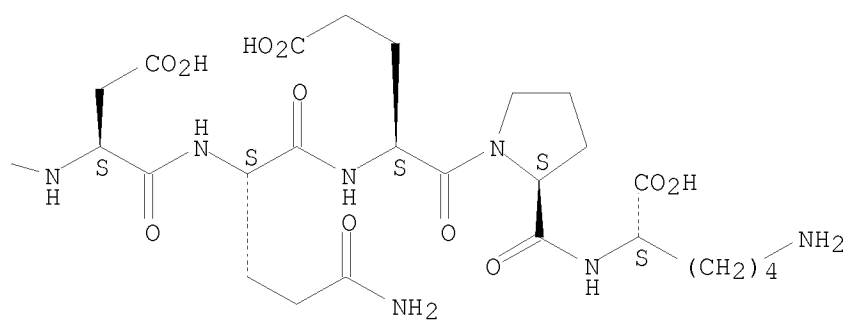
PAGE 1-B



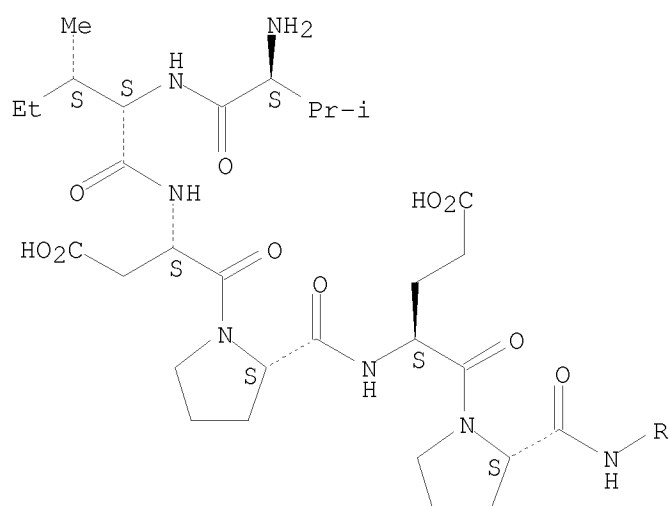
PAGE 2-A



PAGE 2-B



PAGE 3-A



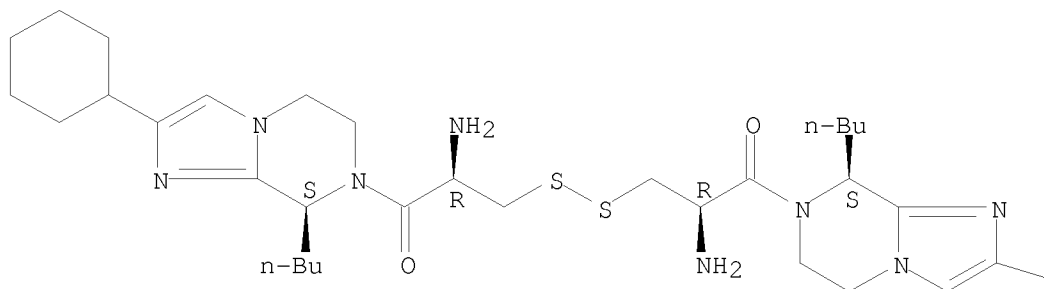
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

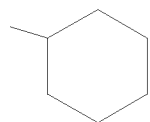
L3 116 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
 IN Imidazo[1,2-a]pyrazine, 7,7'-[dithiobis(2-amino-1-oxo-3,1-propanediyl)]bis[8-butyl-2-cyclohexyl-5,6,7,8-tetrahydro-,
 [8S-[7[S*[S*(R*)]]],8R*]]- (9CI)
 MF C38 H62 N8 O2 S2

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

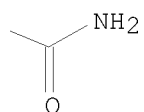
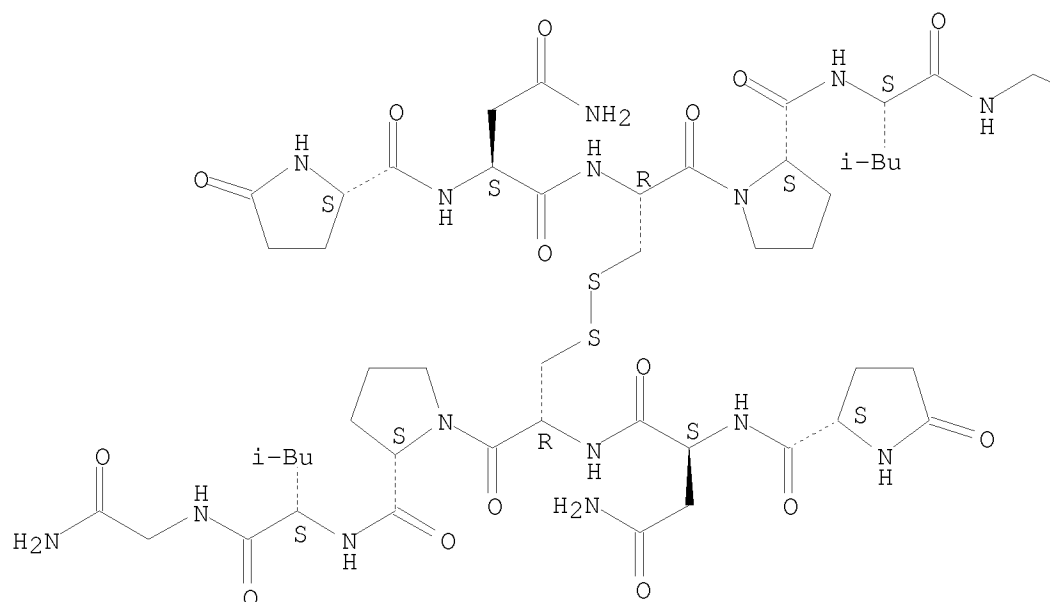


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 116 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
 IN Glycinamide, 5-oxo-L-prolyl-L-asparaginyl-L-cysteinyl-L-prolyl-L-leucyl-,
 bimol. (3→3')-disulfide (9CI)
 SQL 12,6,6
 MF C50 H78 N16 O16 S2

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 116 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

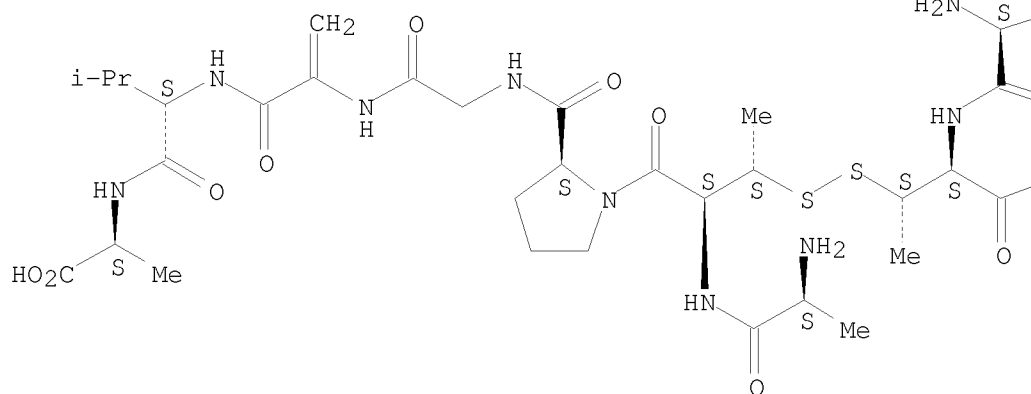
IN L-Alanine, L-alanyl-(2S,3S)-2-amino-3-mercaptopropanoyl-L-prolyl-glycyl-2,3-didehydroalanyl-L-valyl-, bimol. (2→2')-disulfide (9CI)

SQL 14,7,7

MF C50 H80 N14 O16 S2

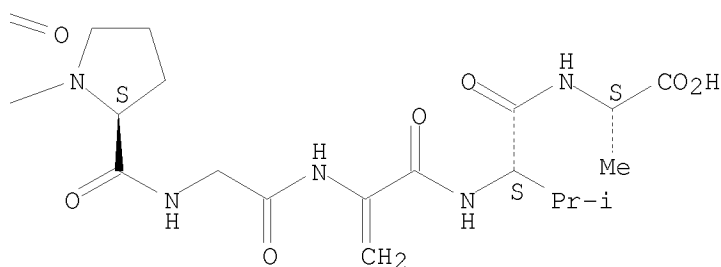
Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

Me



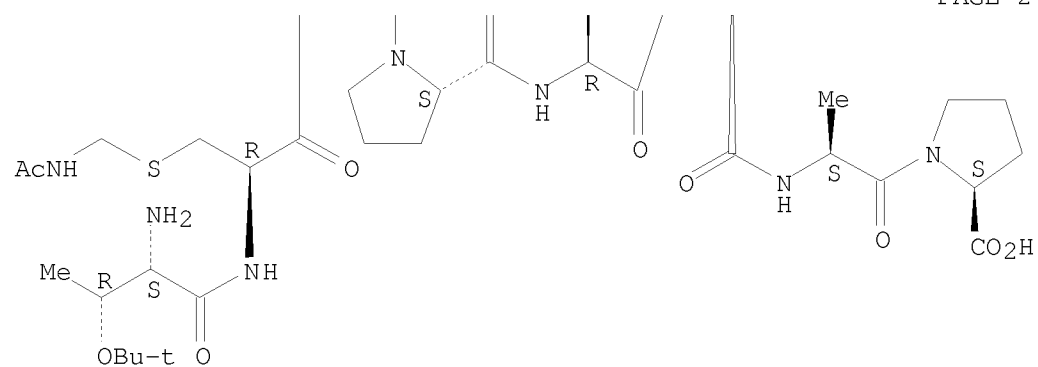
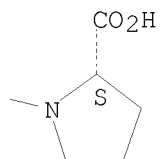
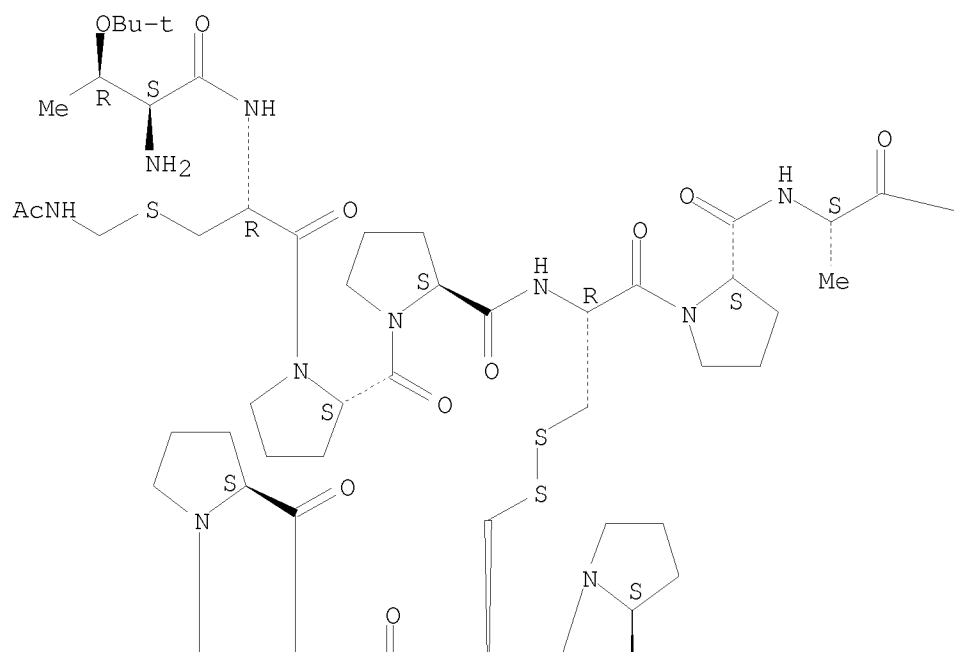
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 116 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
 IN L-Proline, O-(1,1-dimethylethyl)-L-threonyl-S-[(acetylamino)methyl]-L-cysteinyl-L-prolyl-L-prolyl-L-cysteinyl-L-prolyl-L-alanyl-, bimol. (5→5')-disulfide (9CI)
 SQL 16,8,8
 MF C80 H128 N18 O22 S4

RELATED SEQUENCES AVAILABLE WITH SEQLINK

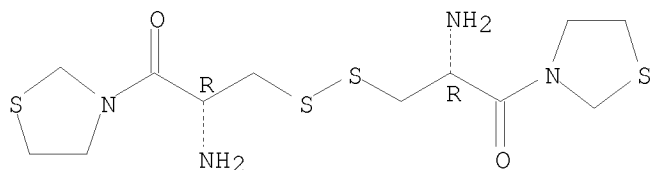
Absolute stereochemistry.



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 116 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 1-Propanone, 3,3'-dithiobis[2-amino-1-(3-thiazolidinyl)-, (2R,2'R)-
MF C12 H22 N4 O2 S4

Absolute stereochemistry.



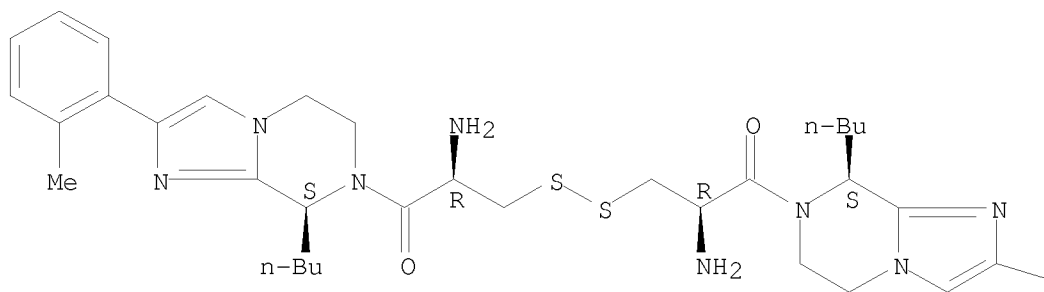
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

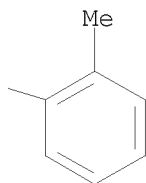
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 116 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Imidazo[1,2-a]pyrazine, 7,7'-[dithiobis(2-amino-1-oxo-3,1-propanediyl)]bis[8-butyl-5,6,7,8-tetrahydro-2-(2-methylphenyl)-, [8S-[7[S*[S*(R*)]]],8R*]]- (9CI)
MF C40 H54 N8 O2 S2

Absolute stereochemistry.

PAGE 1-A





PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> fil casreact

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

179.74

179.95

FILE 'CASREACT' ENTERED AT 09:46:50 ON 25 AUG 2008

USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT

COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT:1840 - 23 Aug 2008 VOL 149 ISS 9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

```
*****
*
*      CASREACT now has more than 15.3 million reactions      *
*
*****
```

CASREACT contains reactions from CAS and from: ZIC/VINITI database (1974-1999) provided by InfoChem; INPI data prior to 1986; Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich; organic reactions, portions copyright 1996-2006 John Wiley & Sons, Ltd., John Wiley and Sons, Inc., Organic Reactions Inc., and Organic Syntheses Inc. Reproduced under license. All Rights Reserved.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 09:44:03 ON 25 AUG 2008)

FILE 'REGISTRY' ENTERED AT 09:44:21 ON 25 AUG 2008
L1 STRUCTURE UPLOADED
L2 8 S L1 SSS SAM
L3 116 S L1 SSS FULL

FILE 'CASREACT' ENTERED AT 09:46:50 ON 25 AUG 2008

=> s 13

L4 11 L3

=> d 1-11 fcrd ibib abs

L4 ANSWER 1 OF 11 CASREACT COPYRIGHT 2008 ACS on STN

RX(5) OF 20 - REACTION DIAGRAM NOT AVAILABLE

ACCESSION NUMBER: 147:73015 CASREACT

TITLE: Chiral O-(Z- α -aminoacyl) sugars: convenient
building blocks for glycopeptide libraries

AUTHOR(S): Katritzky, Alan R.; Angrish, Parul; Narindoshvili,
Tamari

CORPORATE SOURCE: Center for Heterocyclic Compounds, Department of
Chemistry, University of Florida, Gainesville, FL,
32611-7200, USA

SOURCE: Bioconjugate Chemistry (2007), 18(3), 994-998

CODEN: BCCHE; ISSN: 1043-1802

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB 1,2:3,4-Di-O-isopropylidene- α -D-galactopyranose,
1,2:5,6-di-O-isopropylidene- α -D-glucofuranose, and
2,3:5,6-di-O-isopropylidene- α -D-mannofuranose are efficiently
O-acylated in 78-96% yields with readily available N-(Z- α -
aminoacyl)benzotriazoles under microwave irradiation to give chiral
O-(Z- α -aminoacyl) sugars, e.g., Z-L-Phe-O-galactopyranose. The
original chirality was retained as evidenced by HPLC.

REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 11 CASREACT COPYRIGHT 2008 ACS on STN

RX(19) OF 25 - REACTION DIAGRAM NOT AVAILABLE

ACCESSION NUMBER: 146:380175 CASREACT

TITLE: Efficient microwave assisted access to chiral
O-(α -protected-amino-acyl) steroids

AUTHOR(S): Katritzky, Alan R.; Angrish, Parul

CORPORATE SOURCE: Center for Heterocyclic Compounds, Department of
Chemistry, University of Florida, Gainesville, FL,
32611-7200, USA

SOURCE: Steroids (2006), 71(8), 660-669

CODEN: STEDAM; ISSN: 0039-128X

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Chiral O-(α -protected-amino-acyl) steroids and O-(α -protected-
dipeptidoyl) steroids are conveniently prepared under microwave irradiation in
isolated yields of 65-96%, with complete chirality retention. The
reaction utilized readily available N-(Z- α -amino-acyl)benzotriazoles
and Z-dipeptidoylbenzotriazole, with naturally occurring cholesterol,
stigmasterol, sitosterol, or estrone.

REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 11 CASREACT COPYRIGHT 2008 ACS on STN

RX(10) OF 16 - REACTION DIAGRAM NOT AVAILABLE

ACCESSION NUMBER: 146:359129 CASREACT

TITLE: Convenient and efficient preparation of N-protected (α -aminoacyl)oxy-substituted terpenes and alkanes

AUTHOR(S): Katritzky, Alan R.; Angrish, Parul

CORPORATE SOURCE: Center for Heterocyclic Compounds, Department of Chemistry, University of Florida, Gainesville, FL, 32611-7200, USA

SOURCE: Synthesis (2006), (24), 4135-4142

CODEN: SYNTBF; ISSN: 0039-7881

PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal

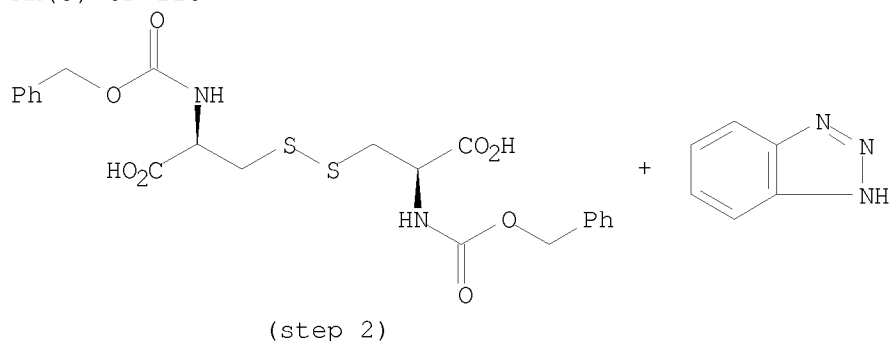
LANGUAGE: English

AB Chiral N-protected (α -aminoacyl)oxy-substituted terpenes and alkanes, including diastereomeric analogs, were conveniently and efficiently prepared from the corresponding readily available chiral and racemic 1-{[(benzyloxycarbonyl)amino]acyl}benzotriazoles under microwave irradiation with naturally occurring terpene alcs. or alkanols.

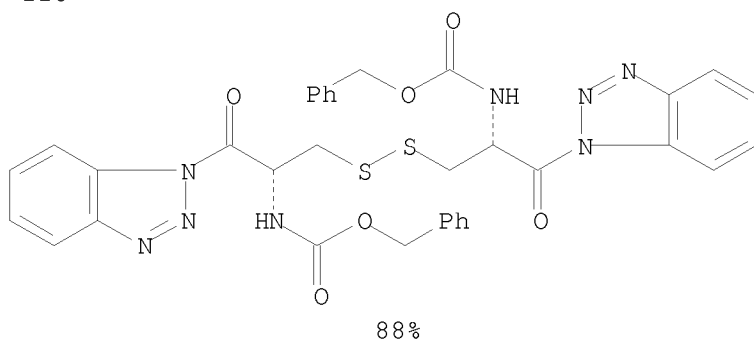
REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 11 CASREACT COPYRIGHT 2008 ACS on STN

RX(5) OF 118



RX(5) OF 118

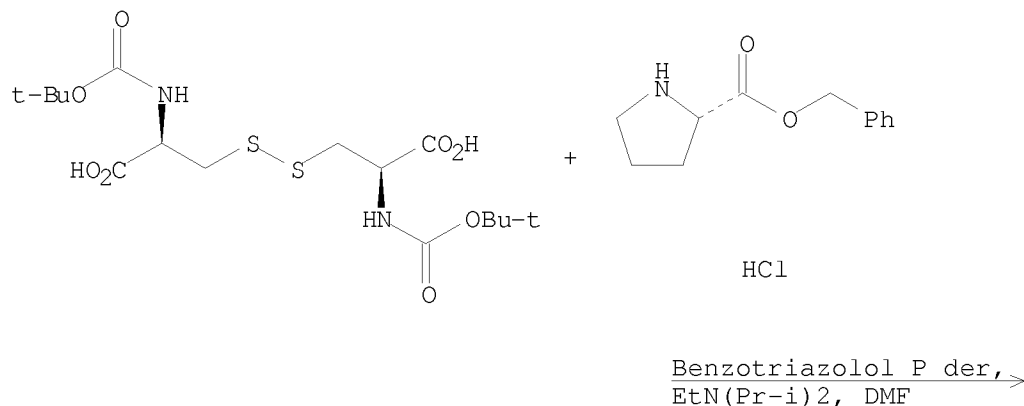


CON: STAGE(1) 20 deg C; 20 minutes, 40 - 50 deg C
STAGE(2) 0 deg C; 2 hours, 20 deg C

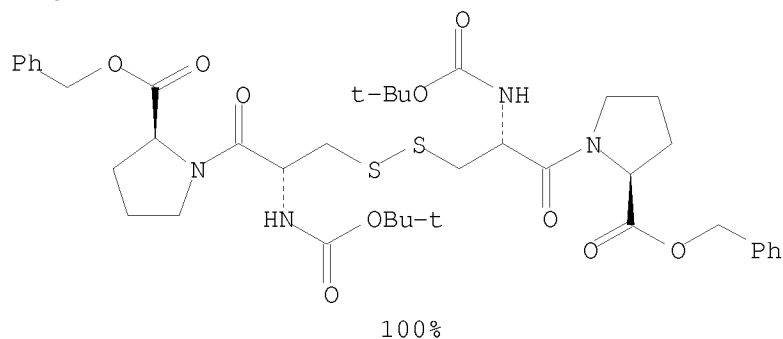
ACCESSION NUMBER: 144:488928 CASREACT
TITLE: The efficient preparation of di- and tripeptides by coupling N-(Cbz- or fmoc- α -aminoacyl)benzotriazoles with unprotected amino acids
AUTHOR(S): Katritzky, Alan R.; Angrish, Parul; Suzuki, Kazuyuki
CORPORATE SOURCE: Center for Heterocyclic Compounds, Department of Chemistry, University of Florida, Gainesville, FL, 32611-7200, USA
SOURCE: Synthesis (2006), (3), 411-424
CODEN: SYNTBF; ISSN: 0039-7881
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
AB N-protected benzotriazoles [Pg-AA-Bt [Pg = benzyloxycarbonyl (Cbz), 9-fluorenylmethyloxycarbonyl (Fmoc); AA = amino acid residue, Bt = benzotriazol-1-yl]] and N-protected peptidylbenzotriazoles [Cbz-AA(1)-AA(2)-Bt] are coupled in aqueous acetonitrile solution with free amino acids or dipeptides to prepare chirally pure dipeptides and tripeptides. Support for the complete retention of chirality was obtained by parallel expts. involving D-Ala, L-Ala, and DL-Ala for the preparation of di- and tripeptides. This and other evidence for chiral integrity was supported by NMR and HPLC analyses.
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 11 CASREACT COPYRIGHT 2008 ACS on STN

RX(2) OF 181



RX(2) OF 181



ACCESSION NUMBER: 140:304052 CASREACT
TITLE: Synthesis of an S-linked glycopeptide analog derived from human Tamm-Horsfall glycoprotein
AUTHOR(S): Zhu, Xiangming; Haag, Tobias; Schmidt, Richard R.
CORPORATE SOURCE: Fachbereich Chemie, Universitaet Konstanz, Konstanz, D-78457, Germany
SOURCE: Organic & Biomolecular Chemistry (2004), 2(1), 31-33
CODEN: OBCRAK; ISSN: 1477-0520
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Direct base-catalyzed S-glycosylation of a cysteine and a homocysteine containing peptide with O-acetyl protected bromides in DMF-water solution furnished two glycopeptide fragments. The two glycopeptide fragments were linked to the target glycopeptide with two S-glycosyl residues mimicking a part of Tamm-Horsfall glycoprotein.
REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 11 CASREACT COPYRIGHT 2008 ACS on STN

RX(29) OF 92 - REACTION DIAGRAM NOT AVAILABLE
ACCESSION NUMBER: 140:253873 CASREACT
TITLE: Biomimetic studies on the mechanism of stereoselective lanthionine formation
AUTHOR(S): Zhu, Yantao; Gieselmann, Matt D.; Zhou, Hao; Averin, Olga; van der Donk, Wilfred A.

CORPORATE SOURCE: Department of Chemistry, University of Illinois at
Urbana-Champaign, Urbana, IL, 61801, USA
SOURCE: Organic & Biomolecular Chemistry (2003), 1(19),
3304-3315
CODEN: OBCRAK; ISSN: 1477-0520
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Selenocysteine derivs. are useful precursors for the synthesis of peptide
conjugates and selenopeptides. Several diastereomers of
Fmoc-3-methyl-Se-phenylselenocysteine [FmocMeSec(Ph)] were prepared and used
in solid phase peptide synthesis (SPPS). Once incorporated into peptides,
the phenylselenide functionality provides a useful handle for the site and
stereospecific introduction of E- or Z-dehydrobutyrine residues into
peptide chains via oxidative elimination. The oxidation conditions are mild,
can be performed on a solid support, and tolerate functionalities commonly
found in peptides, including variously protected cysteine residues.
Dehydropeptides containing unprotected cysteine residues undergo intramol.
stereoselective conjugate addition to afford cyclic lanthionines and
methyllanthionines, which have the same stereochem. as found in
lantibiotics, a family of ribosomally synthesized and post-translationally
modified peptide antibiotics. The observed stereoselectivity is shown to
originate from a kinetic rather than a thermodyn. preference.

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 11 CASREACT COPYRIGHT 2008 ACS on STN

RX(1) OF 9 - REACTION DIAGRAM NOT AVAILABLE

ACCESSION NUMBER: 139:396156 CASREACT
TITLE: Use of thiosulfonate for the protection of thiol
groups in peptide ligation by the thioester method
AUTHOR(S): Sato, Takeshi; Aimoto, Saburo
CORPORATE SOURCE: Institute for Protein Research, Osaka University,
Suita, Osaka, 565-0871, Japan
SOURCE: Tetrahedron Letters (2003), 44(44), 8085-8087
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Use of thiosulfonate for protecting thiol (-SH) groups in peptide ligation
by the thioester method was examined Thiosulfonate was introduced and was
stable in the presence of silver ion, 4-dihydro-3-hydroxy-4-oxo-1,2,3-
benzotriazine, and diisopropylethylamine. Based on these results, a
strategy for using the thioester method and the native chemical ligation
method in the synthesis of a single polypeptide, H-Met-Ala-Glu-Asp-Trp-Leu-
Asp-Cys-Pro-Ala-NH₂, is described.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 11 CASREACT COPYRIGHT 2008 ACS on STN

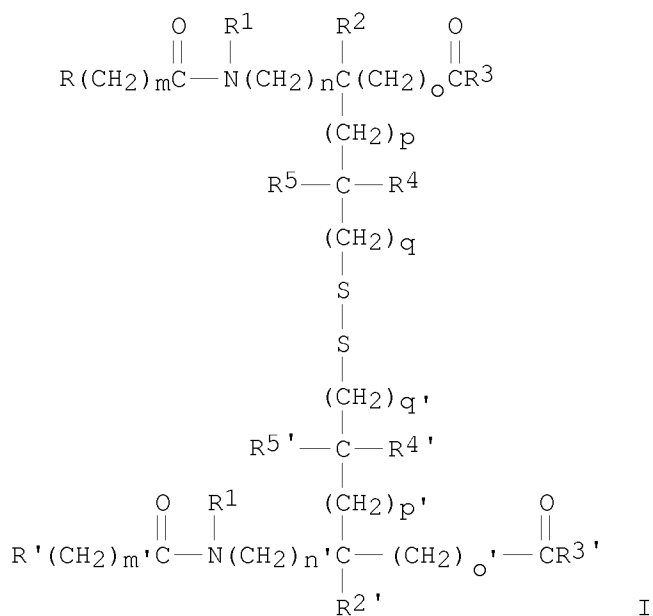
Morpholine, CH₂Cl₂ →

CN1CCOC1C(=O)[C@H](CS[C@@H](C(=O)N2CCOC2)C(=O)C(C)(C)CO[N+](=O)[O-])C(=O)C(C)(C)CO[N+](=O)[O-]

ACCESSION NUMBER:	123:199401	CASREACT
TITLE:	Preparation of amino acid disulfide cardiovascular agents and vasodilators	
INVENTOR(S):	Sandrock, Klaus; Feelisch, Martin; Boekens, Hilmar	
PATENT ASSIGNEE(S):	Schwarz Pharma AG, Germany	
SOURCE:	Ger. Offen., 18 pp.	
	CODEN: GWXXBX	
DOCUMENT TYPE:	Patent	
LANGUAGE:	German	
FAMILY ACC. NUM. COUNT:	1	
PATENT INFORMATION:		

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4321306	A1	19950105	DE 1993-4321306	19930626
WO 9500477	A1	19950105	WO 1994-DE726	19940624
W:	CA, CN, JP, KR, US			
RW:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE			
EP 705244	A1	19960410	EP 1994-918734	19940624
EP 705244	B1	19981104		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE			
CN 1126466	A	19960710	CN 1994-192601	19940624
CN 1045594	C	19991013		

JP 08511777	T	19961210	JP 1994-502335	19940624
AT 172963	T	19981115	AT 1994-918734	19940624
ES 2126122	T3	19990316	ES 1994-918734	19940624
CA 2165992	C	20000822	CA 1994-2165992	19940624
US 5661129	A	19970826	US 1995-557106	19951205
HK 1013283	A1	20000519	HK 1998-114613	19981222
PRIORITY APPLN. INFO.:			DE 1993-4321306	19930626
			WO 1994-DE726	19940624
OTHER SOURCE(S):			MARPAT 123:199401	
GI				



AB The title compds. [I; R, R' = (un)substituted nitratalkyl, (un)substituted Ph; R1, R1', R4, R4', R5, R5' = H, lower alkyl; R2, R2' = H, (un)substituted lower alkyl, Ph, methoxyphenyl, etc.; R3, R3' = HO, lower alkenoxy, (un)substituted lower alkoxy, (un)substituted aryloxy, etc; m, m', n, n', p, p', q, q' = 0-10] [e.g., N,N'-di(3-nitratopivaloyl)-L-cystine di-Et ester (II)], useful as cardiovascular agents and vasodilators, are prepared and a I-containing formulation presented. II was prepared and demonstrated a EC50 for 50% dilation of excised rat aorta rings of 1.5 x 10⁻⁶ M.

L4 ANSWER 9 OF 11 CASREACT COPYRIGHT 2008 ACS on STN

RX(1) OF 4 - REACTION DIAGRAM NOT AVAILABLE

ACCESSION NUMBER: 121:109646 CASREACT

TITLE: Stepwise disulfide bond formation using dimethylsulfoxide / aqueous HCl system

AUTHOR(S): Tamamura, Hirokazu; Otaka, Akira; Koide, Takaki; Fujii, Nobutaka

CORPORATE SOURCE: Fac. Pharm. Sci., Kyoto Univ., Kyoto, 606, Japan

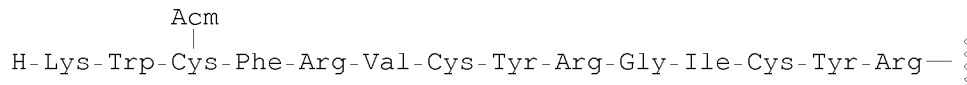
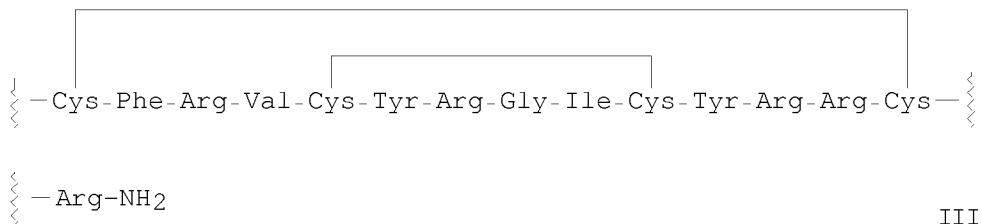
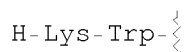
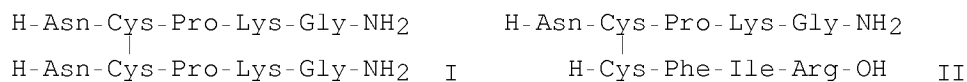
SOURCE: Peptide Chemistry (1993), 31st, 73-6

CODEN: PECHDP; ISSN: 0388-3698

DOCUMENT TYPE: Journal

LANGUAGE: English

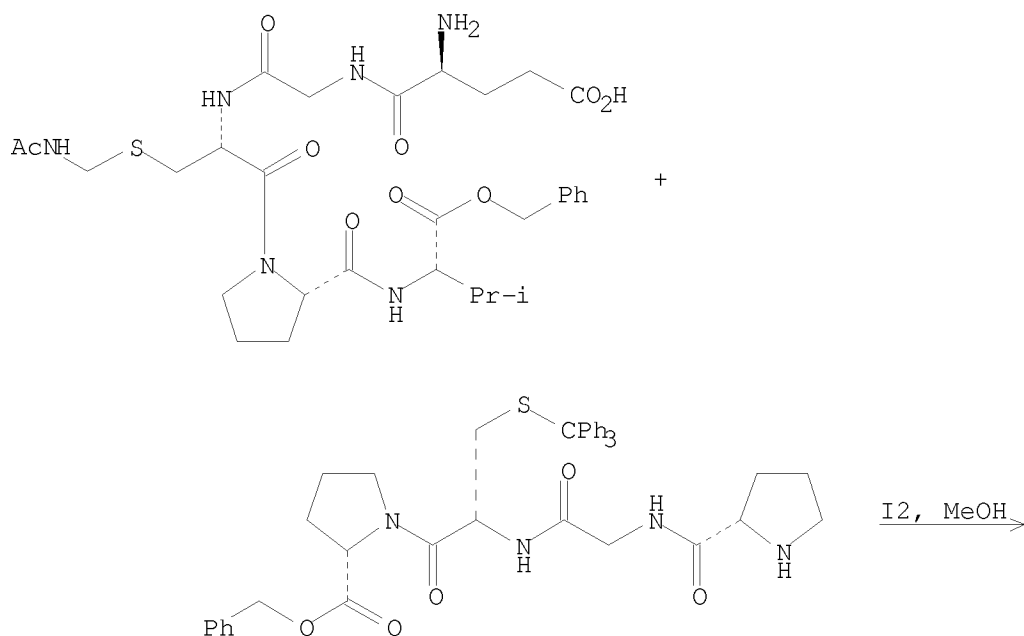
GI



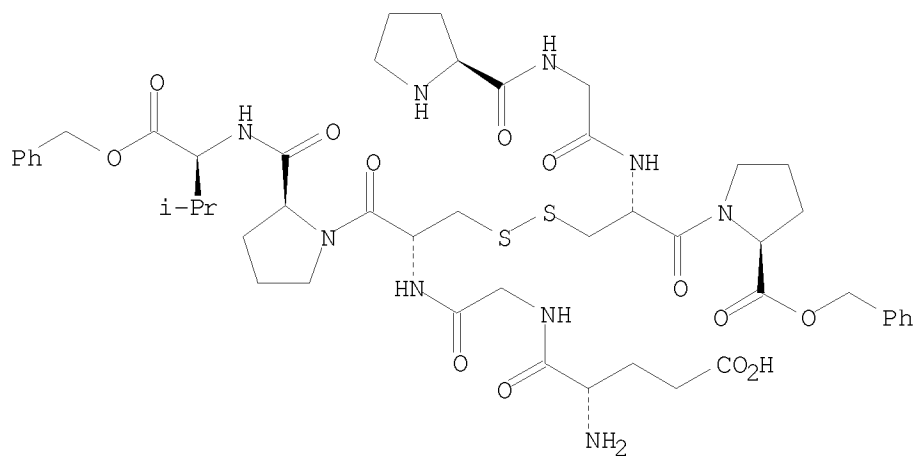
AB The disulfide exchange reaction of homodimer peptide I with H-Cys(Acm)-Phe-Ile-Arg-OH was achieved by treatment with AgOTf (Tf = triflate) and CF₃CO₂H/anisole followed by treatment with 50% DMSO/1N HCl to give heterodimer peptide II. As a model of regioselective synthesis, tachyplesin I (III) was prepared using the the above disulfide exchange reaction on monosulfide III. III was prepared by the air oxidation of linear peptide IV, which was obtained by the solid-phase method.

L4 ANSWER 10 OF 11 CASREACT COPYRIGHT 2008 ACS on STN

RX(17) OF 88



RX(17) OF 88



ACCESSION NUMBER:	113:41301 CASREACT
TITLE:	Synthesis of cystine peptides 21-25/70-73 and 35-39/56-59 of the β -subunit of human choriogonadotropin
AUTHOR(S):	Chaturvedi, Sanjeev; Bahl, Om P.
CORPORATE SOURCE:	Dep. Biol. Sci., State Univ. New York, Buffalo, NY, 14260, USA
SOURCE:	International Journal of Peptide & Protein Research (1990), 35(2), 133-40 CODEN: IJPPC3; ISSN: 0367-8377
DOCUMENT TYPE:	Journal
LANGUAGE:	English
GI	

H-Glu-Gly-Cys-Pro-Val-OCH₂Ph

H-Pro-Gly-Cys-Pro-OCH₂Ph I

H-Ala-Gly-Tyr-Cys-Pro-OCH₂Ph

H-Val-Cys-Asn-Tyr-OCH₂Ph II

AB The syntheses of two asym. cystine peptides with the amino acid residues 21-25/70-73 (I) and 35-39/56-59 (II), based on the linear amino acid sequence and the disulfide bond assignment in the β -subunit of human choriogonadotropin (hCG- β), are described. S-Trityl and S-acetamidomethyl peptide fragments of each cystine peptide were prepared in solution phase and were subjected to oxidation with I₂/MeOH to form the disulfide bridge. The cystine peptides were characterized by their amino acid analyses and fast atom bombardment mass spectrometry. Immunol. characterization by several homologous RIA systems showed that peptide 21-25/70-73 had significant hCG, hCG- β , and hLH activities, while peptide 35-39/56-59 failed to reveal any immunoreactivity.

L4 ANSWER 11 OF 11 CASREACT COPYRIGHT 2008 ACS on STN

RX(30) OF 580 - REACTION DIAGRAM NOT AVAILABLE

ACCESSION NUMBER: 111:154345 CASREACT

TITLE: Synthesis of the bis-cystinyl-fragment
225-232/225'-232' on the human IgG1 hinge region

AUTHOR(S): Wuensch, E.; Moroder, L.; Goehring; Romani, S.;
Musiol, H. J.; Goehring, W.; Bovermann, G.

CORPORATE SOURCE: Dep. Peptide Chem., Max Planck Inst. Biochem.,
Martinsried, Fed. Rep. Ger.

SOURCE: International Journal of Peptide & Protein Research
(1988), 32(5), 368-83
CODEN: IJPPC3; ISSN: 0367-8377

DOCUMENT TYPE: Journal

LANGUAGE: English

GI

H-Thr-Cys-Pro-Pro-Cys-Pro-Ala-Pro-OH

H-Thr-Cys-Pro-Pro-Cys-Pro-Ala-Pro-OH I

AB In human IgG1, the two heavy chains are crosslinked in the central portion of the mol. by two disulfide bridges forming a double chain bis-cystinyl cyclic peptide in a parallel alignment. For synthetic studies, the sequence portion 225-232/225'-232' (I) was chosen. By a combination of the S-tert-butylthio and the S-acetamidomethyl groups, selective cysteine pairings in two successive steps produced the hinge hexadecapeptide in parallel and antiparallel alignments as homogeneous and well characterized compds. Thiol-disulfide interchange expts. on the antiparallel dimer led to over 90% conversion to the parallel isomer. Similarly, random air-oxidation was found to generate again mainly the parallel dimer, thus strongly suggesting that this sequence portion contains sufficient structural information for a correct assembly of the two heavy chains of Igs without decisive contribution of a protein disulfide isomerase.

=> logoff

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

69.51

249.46

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-8.25

-8.25

STN INTERNATIONAL LOGOFF AT 09:49:49 ON 25 AUG 2008